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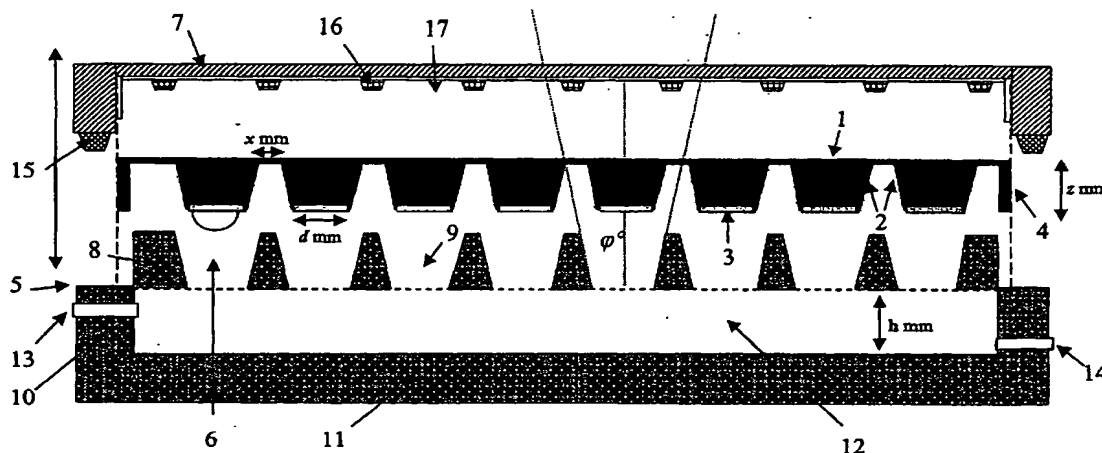
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(54) Title: **SYSTEM, SUBSTRATE PLATE AND INCUBATION DEVICE FOR CONDUCTING BIOSAYS**



(57) Abstract: A system for conducting bioassays comprises a substrate plate with wells, and an incubation device for holding the plate. The substrate plate comprises a microplate with an array of wells arranged in rows and columns, wherein the bottom of each well is a microarray substrate having oriented flow-through channels. The incubation device comprises an incubation chamber for holding the microplate and a cover for sealing the incubation chamber. The incubation device has a heat block with array of openings, each opening adapted to receive a well of the microplate. A sealing gasket is provided for individually sealing each well of the microplate.